

Sentiment Analysis in Social Media based on English Language Multilingual Processing Using Three Different Analysis Techniques

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Abstract:

Numerous numbers of companies have utilized the web to offer their services and products. Web customers dependably look through the reviews of other customers towards a product or service before they chose to buy the things or viewed the films. The company needs to analyse their customers' sentiment and feeling based on their comments. The outcome of the sentiment analysis makes the companies easily discover either the expression of their users is more to positive or negative. There are numerous numbers of sentiment analysis techniques available in the market today. However, only three (3) techniques will be used in this research which are the Python NLTK Text Classification, Miopia and MeaningCloud. These techniques used to analyse the sentiment analysis of the reviews and comments from English language in social media. 2400 datasets from Amazon, Kaggle, IMDb, and Yelp were used to analyse the accuracy of these techniques. From this analyses, average accuracy for sentiment analysis using Python NLTK Text Classification is 74.5%, meanwhile only 73% accuracy achieved using Miopia technique. The accuracy achieved when using MeaningCloud technique is 82.1% which is the highest compared to other techniques. This shows that hybrid technique offers a greatest accuracy for sentiment analysis on social reviews

Keywords: Multilingual Sentiment Analysis; English Language; Text classification

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